
1. Jeonnam, Global Energy New Industry Capital

II. Jeonnam Status and Potential

 **Jeonnam is the most optimal location for national offshore wind farm development that will support the government's energy conversion policy and the Korean Green New Deal Policy**

- Home to nation's best offshore wind power potential, hydrogen production and renewable energy generation capacity with energy-related companies integrated in Naju
 - * Highest renewable energy generation (1,991 GWh, No. 1 in Korea), offshore wind power potential (12.4 GW, No. 1 in Korea), hydrogen production (554,000 tons per year, No. 2 in Korea)
- Home to approx. 40% of marine-related energy potential (offshore wind, tidal power, tidal power), making it the best place for marine energy generation and related technology demonstration
- Geographical strength as a starting point of a Northeast Asian super grid with power crossing between Korea, China and Japan
- Integrated convergence industry eco-system with a marine energy related virtuous supply chain cycle between local government - large enterprises - small & medium-sized enterprises

 **Fostering KEPCO Tech as a world-class energy engineering college, leading the global energy industry**

- At the national level, Ministry of Trade, Industry and Energy announced that

Jeollanam-do will be promoted as a base for the “Next Generation Energy New Industry”, as part of the 8 Major National Innovative Growth Projects (2019.Jan.)

- * Creating an “Energy Valley” that builds an innovative ecosystem concentrating new energy industry-related companies and research centers around Bitgaram Innovation City ('15. 1.~)

- Securing human resources and physical infrastructure to support the next-generation energy core technology R&D by attracting KEPCO Tech and research complexes

- * As the KEPCO Tech will be established in Jeonnam, foundation laid for source technology R&D and global talent cultivation to lead the next-generation

- Developing the “Energy Science Valley” in Naju, like the “Silicon Valley” in the United States, and creating world-class success stories through energy new industry cutting-edge technology development

 **Jeonnam Blue Energy is an optimal project for realizing the “Green New Deal” that creates new jobs while meeting the government’s “Renewable Energy 3020” goal and responding to climate change**

III. Vision and Goals

Vision	Jeonnam, Global Energy New Industry	
Goals (2030Y)	Attract 1,000 energy enterprises Create 12,000 Jeonnam win-win jobs	
Implemen- tation Strategy	• Establish global energy industry infrastructure • Energy New Industry convergence eco-system • Establish Green New Deal based offshore wind farm • Create foundation for energy independence	
Assign- ments	Global Energy Industry Infra.	Establish KEPCO Tech to lead the new energy industry Attract Super Power Laser Center Create a pilot industrial complex exclusively for RE100 Establish Korea Polytechnic University Electric Power Technology Education Center
	Energy Industry Convergence Eco-system	Early launch of energy industry convergence complex New Energy Indus. Regulatory Freedom Special Zone Pilot Project Operation of Energy Valley Small Giants R&D Special Zone Develop re-manufacturing technology for old power equipment Establish secondary battery material parts test evaluation center Build ESS for renewable energy expansion P2G technology development long-term storage and conversion of renewable energy Establish low voltage DC core equipment certification support center
	Green New Deal based Offshore Winder Farm	Establish large-scale offshore wind power complex Offshore wind power pier and hinterland facility development Establish ultra-large wind power demonstration base Build offshore wind power convergence industrialization platform Water electrolysis system reliability improvement technology development
	Energy independence	Create profit-sharing small solar power generation farms Demonstration for community scale renewable independent model
Future Direction	Become a global energy new industry hub via the establishment of a renewable energy innovative eco-system	

3. Jeonnam, Immunity-specific Biomedical Hub

II. Jeonnam Status and Potential

Designated as the only vaccine industry special zone in Korea (Hwasun region)

[Special Zone Overview (2010~2023)]

- Location : Jeonnam Hwasun Biopharma Industrial Complex, Entire area of Hwasun Chonnam National University Hospital
- Land Area: 0.94km² (Designated by the former Ministry of Knowledge Economy)
- Project Cost : KRW 935.8B (National 370.8, Local 195.3)
- Recognitions : Most Excellent ('18Y), Excellent twice ('12,'15Y), etc.

- **(Establishment of full-cycle bio infrastructure)** Most optimal location for advanced new drug development with full-cycle infrastructure such as research and development, pre-clinical, clinical, production, and licensing
 - R&D (Biopharmaceutical Center, Chonnam National University), Preclinical (KTR), Clinical (Hwasun Chonnam National University Hospital), CMO (Biopharmaceutical Center, Microbial Demonstration Center), Production (Green Cross, etc.), License (Ministry of Food and Drug Safety, Vaccine Safety Technology Support Center)
- **(Cancer-specific Hwasun Chonnam Univ. Hospital)** Home to outstanding medical technology and know-how as Korea's one of the 5 major cancer-specialized general hospital located in the region ⇒ Clinical support available
 - 10,000 cancer surgery cases a year, “No. 1” in cancer surgery cases per bed, Gwangju·Jeonnam Integrated Cancer Center('19)
- **(Green Cross Hwasun Plant)** First in Korea to successfully produce undiluted vaccine solution during 2009 swine flue outbreak (26M doses) ⇒ Experience in overcoming national infectious disease crisis

Abundant natural resource environment (Healing Resources)

- Possessing outstanding natural environment, medical infrastructure, and “healing and recreation cluster” development potential
 - * Korea’s largest national park (37%), coastline (50%), number of islands (62%), tidal flats (44%), etc.
- Possibility for natural resource industry base advancement via natural product raw material linkage processing system, the opening of the herbal medicine resource research center, and the establishment of the medicinal crop industrialization support center
 - Completed functional analysis and DB construction of 271 natural products in the province, aimed to expand to 350 types

Driving force secured through presidential pledge, and national vision proclamation

- 「Hwasun~Naju~Jangheung Biopharmaceutical Industry Belt Construction Project」 selected as part of the 5-year state administration and the Presidential Regional Commitment Implementation Plan
- Declared ‘Blue Economy Vision’(‘19.7.12), central government’s full support promised by connecting ‘Bio-health National Vision(‘19.5.)’

III. Vision and Goals

Vision	Jeonnam, Immunity-specific Biomedical Hub	
Goals (2030Y)	300 investment attraction cases Create 5,000 Bio industry related jobs	
Implement- ation Strategy	• Establish high-tech medical base for infectious and intractable disease treatment • Establish full cycle vaccine and immune-therapy development support system • Create an natural product pharmaceutical industry ecosystem • Create a medical-linked natural healing industry ecosystem	
Assign- ments	Cutting-edge medical base for treatment of infectious and intractable diseases	Build and expand national immunotherapy innovation platform Create advanced precision medical industrialization platform Establish K-immune research innovation center Infectious disease-intractable disease prevention and treatment vaccine development Establish molecular diagnostic device development support center Vaccine immunotherapy non-clinical model development Establish National Medical University Establish National Cardiovascular Disease Center
	Vaccine · immunotherapy development full-cycle support syst.	Establish National Microbial Demonstration Support Center National vaccine safety technology support center Stem cell therapy R&D and immune cell therapy industrialization platform Establish bio-health convergence knowledge industry center Drug delivery system test method development
	Natural product pharmaceutical industry ecosystem	Establish natural medicines-cosmetics processing of raw materials and mass production facilities Support for algae-based bio-health care material pilot business Establish Glocal Natural Products Drug Development Center Establish platform for functional home convenience meal (HMR) demonstration commercialization
	Natural healing industry eco.	Establish forest-marine healing efficacy verification center Establish a medical-linked natural healing healthcare platform
Future Direction	Establish a national full-cycle medical-drug-healing high-tech medical complex that combines new bio drugs, natural products, and medical services	

4. Jeonnam, Future-oriented Transport Industry Hub

II. Jeonnam Status and Potential

(Drone) Largest pilot airspace in Korea, possessing the best drone industry development infrastructure such as the R&D-Test Evaluation-Demonstration/Certification one-stop support system

- Home to the largest pilot airspace for drone business model demonstrations
 - Goheung: altitude 450m, diameter 22km, area 380km²; Gwangyang: altitude 450m, diameter 8km, area 50km²
- One-stop hub to support drone companies such as prototype development, test evaluation, etc.
 - Technology development (company), test evaluation (Aerospace Research Institute), integrated certification (aviation safety technology institute), corporate support (Jeonnam TP)
- * Operating a 0.7km-scale aviation center (unmanned aerial vehicle test building, etc.), and building a national comprehensive flight performance test site for manned·unmanned aerial vehicles demonstration

Best infrastructure to foster e-mobility industry, and possess the basis for related companies support and strengthening convergence capabilities

- Designated as free regulatory zone for e-mobility R&D and driving demonstrations, home to e-mobility industry cultivation foundation such as outdoor performance evaluation test site and 30 types of equipment
- Building a micro-electric vehicle demonstrations cluster for mobility-linked services,

logistics·delivery services, public services ⇒ Expand application to domestic new industries and induce overseas exports

- Institutions for corporate support are located such as Korea Automobile Research Institute e-Mobility Center and Korea Smart E-Mobility Association, and possesses optimal conditions for technology convergence with energy utilities (KEPCO, etc.), and high-tech materials companies (hydrogen fuel cells, lightweight materials, etc.)

(Eco Ships) World-class conditions for technology development and demonstration of coastal ships and commercialization

- **(Ship)** Intensive distribution of coastal ships, optimal to build eco ship new technology demonstration complex
 - Domestic coastal passenger ship 55%, fishing boats concentrations 41% (No. 1 in Korea), 1,193 ships (No. 2 in Korea)
 - Revitalizing the stagnant coastal ship industry by creating eco- friendly ship core industry cluster (alternative fuel propulsion system, unmanned control technology, etc.), and transforming into high value-added global new industry
- **(Industry) Focused fostering and supply-demand infrastructure such as secondary battery, new materials, ship-building industry**
 - Nurturing an eco-friendly coastal ship new industry linking southwest coastal region's ship infrastructure and archipelago islands to create a world-class tech mecca (high-tech clean·unmanned ship new industry, etc.)

III. Vision and Goals

Vision	Jeonnam, Future-oriented Transport Industry Hub	
Goals (2030Y)	870 investment attraction cases Create 35,000 jobs in future transport industry	
Implemen- tation Strategy	• Create a new e-mobility industry ecosystem • infrastructure · production complex for PAV demonstrations • Build a next-gen eco-friendly ship industry hub	
Assign- ments	E-Mobility New Industry Eco-system	Demon station of micro EV industry promotion service support Establish future vehicle electromagnetic compatibility certification evaluation system Establish a basis for e-mobility process advancement Electric vehicle open common platform development Personal mobility platform core tech development and demonstration Smart mini shuttle core tech development and demonstration Establish a e-mobility specialized knowledge industry center ultra-small EV lightweight material body development and demonstration Supply of 9,000 e-mobility units from Jeollanam-do
	PAV demonstration infrastructure · production complex	Smart farming demonstration and business expansion using 5G-based drones Establishment and demonstration of industrial drone corporate fostering foundation Build national manned·unmanned aircraft certification integrated control infrastructure eVTOL autonomous flight core technology and equipment construction project 433MHz-based drone operation communication technology development and demonstration Establish the foundation for future aircraft high safety core parts commercialization Create future aircraft specialized production complex, attract anchor companies
	Next-gen eco-friendly ship industry hub	Develop electric propulsion lanes and mobile power supply systems Eco ship mixed fuel tech development and demonstration projects Establish basis for LNG cryogenic insulation system localization
Future Direction	Take the lead in green energy-based future transport equipment industry to pioneer the next-generation national strategic industries	

Agriculture,

Fisheries

5. Jeonnam, Future Life Industry Mecca

II. Jeonnam Status and Potential

 **Agriculture, forestry, fishing sector in GRDP ('18): KRW 5,337 Bil. (15.4% of the KRW 34.5 Tril. nation-wide, No. 1 in Korea)**

- Share in total GRDP of Jeonnam: 7.0% of KRW 76 Tril.
- Employment ratio ('19.3.): No. 1 in Korea (4-fold to national average)

(Unit: 1,000 persons)

Industry City·Prov.	All	Agri., Forestry, Fishery	Mining, Manufa cturing	SOC·Other services				
				Total	Construct'n	Wholesale· Retail, Hospitality	Business· Individual, Public services	Electricity, finance, transport, comm.
All	26,805	1,265	4,461	21,079	1,980	5,940	10,026	3,133
(Ratio)	(100)	(4.7)	(16.6)	(78.7)				
Jeonnam	967	190	108	669	83	173	334	80
(Ratio)	(100)	(19.6)	(11.2)	(69.2)				

Agriculture conditions and potential

- No. 1 eco-friendly agricultural area, No. 1 in organic certified area and eco-friendly livestock product shipments
 - Certified area for eco-friendly agri. products ('19): 46,460ha (56.9% of 81,718ha nation-wide, No. 1 in Korea)
 - Organic certified area: 15,722ha (52.9% of 29,711ha nation-wide, No. 1 in Korea)
 - Pesticide-free certified area: 30,738ha (59.1% of 52,006ha nation-wide, No. 1 in Korea)
 - Eco-friendly livestock shipments: 214,000 tons (21.3% of 1M tons nation-wide, No. 1 in Korea)
- Continuous increase of subtropical crops cultivation area due to climate change
 - Subtropical crop cultivation area('18): 82.5ha (26% of 314.3ha nation-wide, No. 5 in Korea)

Fishery conditions and potential

- Home to Korea's largest·best fishery infrastructure resources
 - Mud flats: 1,054km² (42.4% of 2,482km² nation-wide)
 - Undeveloped fishing ground: 63,762ha (2.1-fold of land area)
- Korea's largest seafood production area
 - Fishery production: 192M tons (58% nation-wide, No. 1 in Korea)
 - Bay salt production: 244M tons (93.1% of 262.2M tons nation-wide)
- Optimal aquaculture space with many islands despite being a closed bay
 - Aquaculture production: 1,757M tons (74.1% of 2,372M tons nation-wide, No. 1 in Korea)
 - Aquaculture production volume: KRW 1.7T (61.3% of KRW 2.7T nation-wide, No. 1 in Korea)

III. Vision and Goals

Vision	Jeonnam, Future Life Industry Mecca	
Goals (2030Y)	Farm family income KRW 50M, fishery family income KRW 60M Production volume KRW 15T	
Implemen- -tation Strategy	• Cultivate a smart agriculture–fishery growth model • Establish safe food production·distribution system • Sustainable agriculture–fisheries industry responding to climate change • Create a vibrant farm and fishing community	
Assign- ments	Smart agriculture–fishery growth model	Create Smart Farm big data Create high-tech unmanned automated agricultural production demonstration complex Establish a rural integrated support platform utilizing wired /wireless networks Create a smart livestock ICT pilot complex Create a smart culture cluster for strategic export varieties production
	Safe food production · distribution system	Establish a base for supplying eco-friendly agricultural products in the metropolitan area Expand the base for direct online seafood direct transactions Execute a 300 million dollar seaweed export project
	Sustainable agri–fisheries industry responding to climate change	Foster sustainable eco-friendly agriculture industry Establish a National Climate Change Response Agri Research Complex Establish a seafood export complex Build a marine bio industry cluster Establish a aquatic organisms information·bio industry support center
	Vibrant farm and fishing community	Create a “Youth Agricultural Venture Town” for new jobs in agriculture· rural areas Rural area agreement project Fishing Village New Deal 300 Project Zero marine waste project
Future Direction	Sustainable high–income life industry via smart agriculture–fishery production base	

